Michigan Department of Community Health
MDCH
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LabLink

Michigan Department of Community Health
Bureau of Laboratories

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Important Changes in Reportable Disease Rules

Patricia Somsel, Dr.P.H. and Martha Boehme, MT(ASCP)
Division of Infectious Diseases

There are some important changes in the state's communicable disease rules that directly affect clinical laboratories. The following agents and diseases of recent concern were added to the list of reportable diseases by virtue of an Emergency Rule signed by Governor Granholm in December 2004, and took effect immediately

- Severe Acute Respiratory Syndrome (SARS)
- Avian Influenza
- Orthopox virus (including smallpox and monkeypox)
- *Staphylococcus aureus*, intermediate or resistant to vancomycin (VISA, VRSA), from any site
- Arbovirus (including West Nile virus, Eastern Equine Encephalitis, St. Louis Encephalitis, and California Group [LaCrosse] viruses)
- Spongiform encephalopathies (including Creutzfeldt-Jakob Disease)
- *Streptococcus pneumoniae,* invasive (sterile site). Note change below*

Language has been added to the rule to clarify that all laboratories receiving or processing specimens are required to report results even if the testing is not done on-site (i.e., the specimen is sent to a reference laboratory for testing). The complete text of the Emergency Rule is available at
http://www.micigan.gov/emergingdiseases
Click on the link "MDCH - Reportable Diseases List."

Clinical microbiologists have certainly understood the significance of these "new" agents prior to this legislation, and many have reported them regularly to the health department. The state lab is preparing a reminder tool for all reportable communicable diseases. It will be distributed as soon as possible. In the interim, please add these new agents to any reportable disease lists you may have.

In most cases, laboratory reports are submitted to the local health department in the jurisdiction where the patient resides. Please contact your local health department to report these or any other test results/organisms required by law to be reported to public health. MDCH will work closely with all reporting laboratories to assist and assure that confidentiality will be maintained.

The process of reporting communicable diseases will be made simpler as the Michigan Disease Surveillance System (MDSS) moves forward. Through the MDSS, clinical laboratories will be able to report electronically to their local health department, eliminating much of the current redundancy and reducing the labor-intensive form completion.

*In a January broadcast fax update, laboratories were asked to report all resistant *Streptococcus pneumoniae* (from any site). Initially, the Bureau of Epidemiology indicated interest in *S. pneumoniae* resistant to one or more antibiotics. This meant reporting nearly all isolates. Upon reconsideration, reporting can be limited to sterile site *S. pneumoniae* isolates, whether resistant or susceptible, as long as a yearly antibiogram is submitted as part of the Sentinel Laboratory Network. As part of the surveillance for vaccine resistance, we request sterile site isolates of *S. pneumoniae* from cases less than 5 years of age.

Please contact Dr. Mary Grace Stobierski at (517) 335-8165 or stobierskim@michigan.gov for questions concerning communicable disease reporting.

Upper Peninsula Regional Laboratory Moves

Patricia Wheeler, B.S.
Laboratory Scientist

MDCH, Bureau of Laboratories is excited to announce that the Upper Peninsula Regional Laboratory has moved to a new facility. The new lab is located at 1402 East Sharon Avenue, Suite 300, Houghton, MI 49931. The mailing address has remained the same, P.O. Box 38. The new general laboratory phone number is: 906-487-3011 and the FAX is: 906-487-3682. Dr. Sottile's direct number is 906-487-3600. Direct lines are now available to each area of the lab. Please do not hesitate to contact the lab for any assistance.

PFGE	906-487-3680
Micro/BT	906-487-3680
STD	906-487-3678
Water	906-487-3679

The laboratory is in the Advanced Technology Development Complex on the Michigan Technological (MTU) campus, which houses different businesses whose mission is to promote new jobs and technology. The Regional Laboratory will be used not only as a public health laboratory, but also as a student training facility for the development of new technologies. MTU students will work with the lab staff on projects that require the lab's expertise.

Upper Peninsula Regional Laboratory Building

One of the first joint projects between the U.P. lab and MTU will address the availability of clean drinking water in developing countries. The World Health Organization (WHO) has identified the lack of potable water throughout the world as the single greatest public health problem today. Currently, the U.P. lab is working with the Aqua Terra Group on a project to develop an inexpensive, easy to use test to detect coliforms and *E. coli* in water. It is hoped that this test will be used in developing countries where little or no technology is available. It should allow for preparation of the required medium and incubators from products that can be acquired locally.

The staff at the U.P. Laboratory would like to thank everyone for their patience during the move. We are proud to say that water and specimen testing was not interrupted during the move, even though it seemed quite chaotic at times.


Water Testing Laboratory

MDCH Bureau of Laboratories Announces the New Laboratory Training Calendar.

This calendar may be accessed through the lab website at www.michigan.gov/mdchlab

Click on "Training"

MDCH Welcomes New Emerging Infectious Diseases Research Fellow

Jeff Massey, Dr.P.H.
Molecular Biology Section

The Michigan Department of Community Health would like to welcome Peter Davidson, Ph.D. to the Bureau of Laboratories. In September, Dr. Davidson started a two-year post-doctoral Emerging Infectious Disease (EID) fellowship, co-sponsored by the National Center for Infectious Diseases at the Center for Diseases Control and Prevention (NCID/CDC) and the Association of Public Health Laboratories (APHL).

Dr. Davidson earned his B.S. in microbiology from Ohio University in 1998 and his Ph.D. in Cell and Molecular Biology from Michigan State University in August 2004. He has long had an interest in infectious disease and the relationships between humans and disease. He was awarded an Emerging Infectious Disease Research Fellowship through APHL and CDC in June 2004 and chose MDCH as his host laboratory. His fellowship assignment is in the Molecular Biology Section under the mentorship of Dr. Jeff Massey.

Dr. Davidson anticipates being quite busy over the next two years, initially focusing on increasing the throughput of genotyping assays used as part of the CDC initiative for universal tuberculosis surveillance. Future projects also include the development of a molecular assay for quinolone resistance in *N. gonorrhoeae* isolates and investigation of the mechanism of drug resistance in *M. tuberculosis*. In addition, he will receive training and practical experience in epidemiologic principles and field investigation, laboratory management, and regulatory issues.

Please join the Bureau of Laboratories in welcoming Dr. Davidson!

Resources for Clinical Microbiologists in Michigan

Patricia Somsel, Dr.P.H.
Division of Infectious Diseases

Providing safety and access for technical training for clinical microbiologists in Michigan has become a priority with the Bureau of Laboratories (BOL) over the past several years. Through resources that come from the Centers for Disease Control and Prevention (CDC), the BOL is pleased to have been able to provide NCCLS documents, Clinical Microbiology Procedure Manuals and scholarships to attend the state meeting of South Central Association for Clinical Microbiology (SCACM).

In surveys of laboratory facilities undertaken in 2002, it was discovered that 19 laboratories providing some level of clinical microbiology services lacked a biological safety cabinet (BSC). Due to the inherent danger of some of the agents commonly dealt with and the practices employed, such as entering positive blood cultures, a BSC is a minimal engineering requirement for clinical microbiologists. CDC agreed with this assessment and approved a plan to use funds received from the federal bioterrorism preparedness grant to provide a BSC for clinical labs performing microbiology services while lacking a BSC. To date, 16 BSCs have been provided under this funding; two labs purchased BSCs before funding was announced.

Efforts will continue to assure that every one of over 125 clinical laboratories in the state doing microbiology, can provide a minimal level of safety to their staff. Clinical microbiologists, the first line in detection of emerging infectious diseases, are far too valuable to practice unprotected.

Quirky Bugs…
Strep B? Or Not to Be?

Glenn J. Fink, MT(ASCP)
Reference Bacteriology Unit

Screening of pregnant women at 35 to 37 weeks gestation for vaginal and rectal colonization of *Streptococcus agalactiae* (Group B strep) has become a recommended practice to help identify infants at risk for serious infections from this organism. Identification of recovered beta-hemolytic streptococci often involves a Christie, Atkins, Munch-Peterson (CAMP) test and the use of any of a wide variety of commercially available streptococcal grouping kits. *Streptococcus agalactiae* is both CAMP positive and produces Lancefield's Group B antigen.

An isolate meeting these two criteria was recovered within the last year at a hospital laboratory from a Group B Strep Screen on a nineteen-year-old pregnant female. However, the isolate produced a wide (Group A-like) zone of hemolysis, a feature that alerted the astute microbiologist to pursue further testing. An API 20 Strep was performed, with a numerical profile of 3463314, which interprets as a good identification to the genus level for *Streptococcus.* Choice one was *Streptococcus porcinus* and choice two was *Streptococcus agalactiae*, with a footnote to confirm by serological tests. Following a recommendation in American Society for Microbiology's Manual of Clinical Microbiology (8th edition), the microbiologist also performed a pyrralidonyl-a-naphthylamide hydrolysis (PYR) test, which was weakly positive at 30 seconds. The isolate was ultimately forwarded to the Reference Bacteriology Unit at MDCH for confirmation.

At MDCH, the Gram stain revealed typical oval gram positive cocci in pairs and chains. Colonies were large (>0.5 mm in diameter), gray to white in color, glistening, and produced a wide zone of beta hemolysis on 5% sheep blood agar after 24 hours of incubation. A CAMP test, a PYR test, and a rapid latex test for detecting Groups A, B, C, D, F, and G streptococci was initially performed on the isolate. The CAMP test and the PYR test were both positive, but the latex test was negative for these most common Lancefield serologic groups. A full tube biochemical battery was set up, as well as submission for cellular fatty acid analysis by gas liquid chromatography (GLC). Results of this additional testing confirmed the isolate to be *Streptococcus porcinus.*

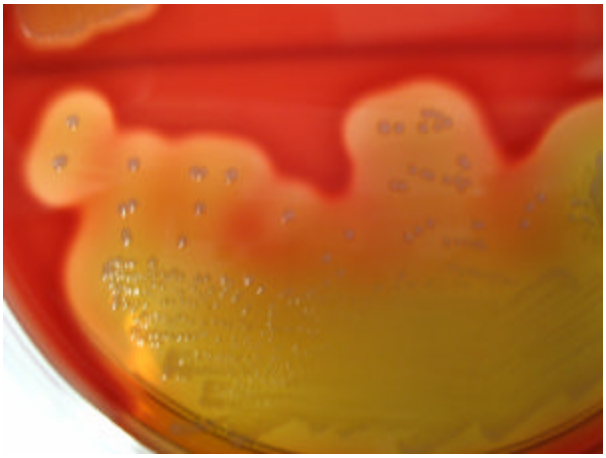
First described in 1984, *Streptococcus porcinus* is usually associated with lymphadenitis in swine. Based on rRNA sequencing studies, it is closely related to the other beta-hemolytic streptococci. Originally described as producing Lancefield's Groups E, P, U, V, or 3 other unnamed experimental group antigens, it has been subsequently shown to cross-react with some commercial Group B streptococcal reagents. Agar gel diffusion studies show lines of partial identity, confirming shared antigenic entities. This cross-reactivity can vary between different manufacturers kits and even between different lot numbers of the same type of kit. Communication with the submitting laboratory revealed that they use a different commercial kit than the one at MDCH, thus explaining the discrepancy between the serological typing results.

In addition to being PYR and CAMP positive, other phenotypic characteristics of *Streptococcus porcinus* include positive results for leucine aminopeptidase (LAP), esculin hydrolysis, arginine dihydrolase, and VP (Voges-Proskauer). Bacitracin susceptibility is negative (ruling out Group A streptococci) and the bile esculin reaction is negative (ruling out the beta-hemolytic enterococci). Acid is fermentatively produced in glucose, maltose, mannitol, ribose, sorbitol, sucrose, and trehalose.

Arabinose, inulin, raffinose, and sorbose are negative. Glycerol, lactose, and melibiose are considered variable. Cellular fatty acid analysis by GLC was typical of the *Streptococcus* genus. Antimicrobial susceptibility testing has shown isolates to be susceptible to all of the appropriate antimicrobial drugs tested except tetracycline, for which slightly more than half are resistant.

The incidence of *Streptococcus porcinus* in humans is unknown but estimated to be quite infrequent. While the most common source has been the genitourinary tract of women of child-bearing age, other sources include skin, blood, urine, wounds, and placenta. While the clinical significance of a *Streptococcus porcinus* isolate from a human source is also unknown at this time, there have been associations made with complications of pregnancy as well as its sole isolation from cases of sepsis. Initiation of antimicrobial therapy would need to be managed by the clinician on a case by case basis.

In summary, laboratories need to be aware that beta-hemolytic streptococci that react with the Group B reagents of commercial kits, are CAMP positive, and produce a wide zone of hemolysis on 5% sheep blood agar may be *Streptococcus porcinus*. Identification of such an isolate may be confirmed by the PYR and VP tests, of which *Streptococcus porcinus* is positive for both and *Streptococcus agalactiae* is negative for both. The following chart lists these differentiating characteristics as well as those of other beta-hemolytic streptococci.



Streptococcus porcinus on 5% Sheep Blood Agar

References:

1. Ruoff, Kathryn L., Whiley, R. A. , and Beighton, D. 2003. Streptococcus, p. 405-417. In: Patrick R. Murray, Ellen Jo Baron, James H. Jorgensen, Michael A. Pfaller, and Robert H. Yolken (ed.), *Manual of Clinical Microbiology*, 8th ed. American Society for Microbiology, Washington, D.C.

2. Facklam, R., Elliot, J., Pigott, N., and Franklin, A. R. 1995. Identification of *Streptococcus porcinus* from Human Sources. *J.Clin.Microbiol*. 33:385-388.

3. Thompson, Terry, and Facklam, Richard. 1997. Cross-Reactions of Reagents from Streptococcal Grouping Kits with *Streptococcus porcinus*. *J.Clin.Microbiol*. 35:1885-1886.

4. Centers for Disease Control and Prevention. 2002. Prevention of Perinatal Group B Streptococcal Disease—Revised Guidelines from CDC. *Morb. Mortal. Wkly. Rpt.* 511(RR-11):1-26.

Table 1

DIFFERENTIAL CHARACTERISTICS OF BETA-HEMOLYTIC STREPTOCOCCI

Species/Group	Serogroup(s)	Colony size	PYR	VP	CAMP	Bacitracin susceptibility	Beta-hemolysis	Bile esculin	Trehalose	Sorbitol
S. pyogenes	A	large	+	-	-	+	wide-zone			
Anginosus group (S. milleri)	A,C,F,G or non-groupable	small	-	+	-	-	variable			
S. agalactiae	B	large	-	-	+	-	narrow/diffuse			
S. porcinus *	B,E,P,U,V & 3 or more unnamed others	large	+	+	+	-	wide-zone	-		
S. dysgalactiae subsp. equisimilis	C or G	large	-	-	-	-	variable		+	-
S. dysgalactiae subsp. dysgalactiae *	C or L	large	-	-	-	-	variable		+	-
S. equi subsp. equi *	C	large	-	-	-	-	variable		-	-
S. equi subsp. zooepidemicus *	C	large	-	-	-	-	variable		-	+
S. canis *	G	large	-	-	-	-	variable		-	-
S. iniae *	non-groupable		+	-	-	variable	narrow beta zone w/ surrounding large alpha zone (incubated anaerobically)			
Beta-hemolytic enterococci	D		+					+		

* primarily pathogens in animals but have been documented as agents of human infections.

5th Annual Michigan Communicable Disease Conference Save the Date

Jennifer Beggs, MPH
Bureau of Epidemiology

The Michigan Department of Community Health, Division of Communicable Diseases will be hosting the 5th Annual Michigan Communicable Disease Conference on May 19, 2005 and May 26, 2005. The location for the May 19th conference will be at the Treetops Resort in Gaylord, MI. The May 26th conference will be held at the Sheraton Lansing Hotel in Lansing, MI. The daylong conferences will provide the latest communicable disease information such as TB in the Workplace, Michigan Surveillance Systems, Raccoon Rabies, the Michigan Communicable Disease Emergency Rule, Norovirus Environmental Cleaning Guidelines, and numerous other topics. Any persons involved with communicable disease prevention and control (e.g., public health nurses, sanitarians, medical directors, health officers, infections control professionals, infectious disease physicians, Clinical microbiologists, etc.) are encouraged to attend. Information for registration will be provided by early April. Questions can be directed to Jennifer Beggs, Infectious Disease Epidemiologist, at (517) 335-8165 or e-mailed to beggsj@michigan.gov.

Important Changes in New CLSI (NCCLS) Document

Martha Boehme, MT(ASCP)
Division of Infectious Diseases

As of January 2005, the National Committee for Clinical Laboratory Standards (NCCLS) changed its name to Clinical and Laboratory Standards Institute (CLSI). Regardless of the name change, the organization still publishes documents that serve as standards of practice in the laboratory, and that may be required by various accreditation agencies (e.g., College of American Pathologists – CAP).

MDCH was able to obtain funding from the CDC to provide Michigan sentinel laboratories with copies of the new M100-S15 document, the updated antimicrobial susceptibility testing tables and interpretive standards. If your laboratory would like a copy, please contact Marty Boehme at telephone 517-335-9654 or by email at boehmem@michigan.gov.

There are several important changes in the M100-S15, many of which will be topics for upcoming continuing education sessions offered by the National Laboratory Training Network (NLTN), South Central Association for Clinical Microbiology (SCACM) and also by MDCH Bureau of Laboratories.

One of the changes in M100-S15 is the addition of a MIC method and interpretive standards for *Neisseria meningitidis.* While the standardization of this testing is welcomed, laboratories are urged to continue to send meningococcal isolates from sterile sites to the MDCH Bureau of Laboratories for susceptibility testing and serotyping. There are safety concerns with this organism. Sterile site cultures and potential or confirmed isolates should only be handled in a Biological Safety Cabinet (BSC) while wearing gloves and gown or lab coat, with special attention to preventing aerosol production. *

In addition, maintaining proficiency in testing may be difficult for laboratories with low numbers of meningococcal isolates. For more information on referring isolates of *Neisseria meningitidis* from sterile sites, please contact Dr. Jim Rudrik, manager of the microbiology section at 517-335-9641. Information is also available on the MDCH website at www.michigan.gov/mdchlab under the "Specimen Submission" link.

*See Lab Link, Summer 2002 issue: http://www.michigan.gov/documents/LabLinkVol8no1_35480_7.pdf
and MMWR weekly Feb 22, 2002 Vol. 51: No. 7: http://www.cdc.gov/mmwr/PDF/wk/mm5107.pdf

Laboratories To Begin Reporting HIV Results to Health Department Beginning April 1, 2005

Martha Boehme, MT(ASCP)
Division of Infectious Disease

Michigan laboratories will soon be required by law to report CD4 counts/percents, HIV viral load results (including undetectable levels), and confirmed positive HIV serology (e.g., positive Western Blot tests) to the health department. The HIV/AIDS reporting requirements were updated by Public Act (PA) 514 of 2004, which takes effect on April 1, 2005. A copy of PA 514 is available at:

http://www.michiganlegislature.org/documents/2003-2004/publicact/pdf/2004-PA-0514.pdf

This law does not remove the existing options for anonymous testing and reporting. Laboratories should report positive results on these patients using the ID number provided by the submitter.

The timeframe for reporting these results varies. Positive HIV results (i.e., confirmed Western Blots) must be reported within seven days of obtaining the test result. CD4 counts/percents and viral loads must be reported within one month of testing. Laboratories must begin weekly reporting of positive HIV results on April 1, 2005 and monthly reporting of HIV viral loads and CD4 counts/percents on July 1, 2005.

Communicable disease results are typically reported to the state through the local health departments, although some jurisdictions may want laboratories to report directly to the state health department. Laboratories are being surveyed to assess current abilities to report. The survey results will be used to determine next steps in the process. Any further questions about laboratory reporting of HIV results should be directed to Elizabeth Hamilton, HIV/AIDS Epidemiology Specialist at 517-335-8247.

FUN FUNGI...

Window Treatments

Sandy Arduin, MT(ASCP) & Bruce Palma, MT(ASCP) - Mycobacteriology/Mycology Unit

This article is in reference to a trick of the trade commonly used in the mycology lab at MDCH. Moulds are often placed on the windowsill at room temperature to encourage them to grow, sporulate, and/or, produce pigment. Placing what appears to be a non-viable *Trichophyton rubrum* on the windowsill can lead to growth. *Epicoccum* spp. and *Pithomyces* spp. also benefit from window treatment to enhance the production of conidia. Some moulds such as *Gliocladium roseum* and *Candelabrella* spp. typically do not produce pigment until placed at room temperature on the windowsill. It is not known if it is the room temperature, the UV light from the sun or a combination of both that produces the pigment and enhances conidial development.

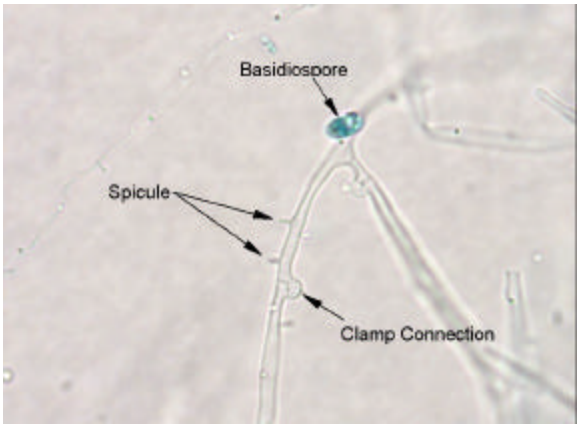
Some species of moulds grow better at room temperature or colder. *Mucor plumbeous* is one such mould. It will grow at 30°C but sporangia and sporangiospore production is enhanced at room temperature. Some isolates of *Cryptococcus* spp. grow better at room temperature. MDCH has also found that the optimum growth temperature for *Geomyces vinaceous* is 5°C.

Keep in mind that some ascomycetes and basidomycetes may take weeks to produce recognizable fruiting structures. A white mould with clamp connections was left at room temperature on the windowsill for several weeks and the following fan shaped basidiocarp (fruiting body) was produced.

Schizophyllum commune

The original culture was white and velvety with no conidia. Clamp connections were observed microscopically indicating the mould was a basidomycete, so the culture was placed in a rack on the windowsill to see if a basidiocarp would form. Approximately three to four weeks later it did.

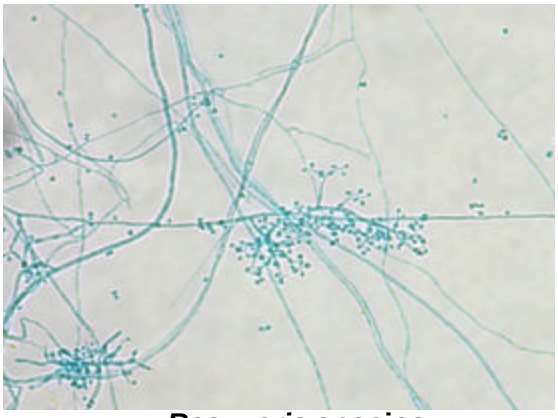
The fruiting body was fan shaped and had a split gill appearance. Microscopically, spicules (small pegs) were observed forming on the sides of the hyphae and clamp connections and basdiospores were also present. The fungus was identified as *Schizophyllum commune* based on these characteristics. *S. commune* is a basdiomycete that is increasingly being reported as a cause of chronic or allergic sinusitis, and invasive infections of the brain, lung and buccal mucosa in both immunosuppresed and immunocompetent individuals. It is important to continue to examine cultures when clamp connections are observed because, in time, an identifiable fruiting body may be formed and the mould may be clinically significant.



Schizophyllum commune

Please contact Sandy Arduin at arduins@michigan.gov with any questions regarding this article or with any suggestions of other topics or specific moulds to be discussed in future articles. Suggestions of moulds difficult to identify or differentiate would be greatly appreciated.

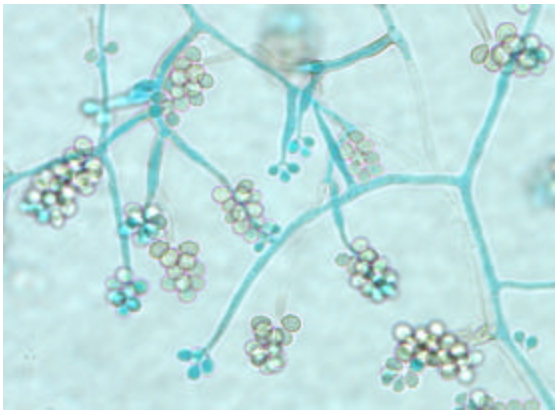
Last Issue=s Picture Quiz Answer:



***Beauveria* species**

This is a picture of *Beauveria* spp. This mould has moderately rapid growth. Colonies appear cottony to powdery and are white to pale pink or pale yellow in color. Microscopically, conidiogenous cells have inflated bases and terminate in a rachis (zig-zag filament). These cells are often grouped in masses. Conidia are hyaline and round to oval in shape. This fungus is frequently found in soil and is pathogenic to insects. It rarely causes infection in humans.

This Issues Picture Quiz: What Mould Is This?



This mould was received as a referred culture from a bronchial washing. The colony was tan and velvety. Microscopically, conidiophores were hyaline with a swollen base that tapered to a rachis-like sympodulae (a sporogenous cell which continues growth sympodially after each condia is produced). Conidia were globose, golden in color and produced in acropetal succession on the rachis-like sporgogenous cell.

Newborn Screening Program Update

Kevin Cavanagh, PhD
Division of Chemistry and Toxicology

Recently, there have been changes to the Michigan Newborn Screening program. On October 1, 2004, the program began testing for Homocystinuria, Citrullinemia and Argininosuccinic Aciduria (ASA). This brings the total number of metabolic diseases screened for to eleven (11). Plans for further expansion of the newborn screening panel, to include all of the disorders recommended by the American College of Medical Genetics (ACMG), are underway. These recommendations have yet to be published in final form but preliminary information has been available since May 2004. This preliminary information is being used as a template for expansion of the Michigan program.

Please visit the website at www.mi.gov/newbornscreening for additional details or call the Newborn Screening Program Office at 517-335-9205. For excellent background information on newborn screening, see http://genes-r-us.uthscsa.edu/.

The Michigan Newborn Screening Program has also entered into a partnership with Children's Hospital of Michigan to establish a comprehensive clinical and laboratory metabolic disease program that will allow Michigan to rapidly expand the newborn screening program. The Children's Hospital of Michigan Metabolic Clinic will be providing the follow up and medical management services for all infants identified to be at risk for inherited metabolic disorders by the Michigan Newborn Screening program.

Lastly, the newborn screening law provides for a yearly fee increase based on the Detroit Consumer Price Index. The new fee for each card is $55.72. This fee schedule took effect on October 1, 2004.

Regional Emerging Infectious Diseases (REIDs) Meetings Established in Michigan

Valerie Reed, RM(ASM), M(ASCP)
Bioterrorism Preparedness Coordinator

Martha Boehme, MT(ASCP)
Division of Infectious Diseases

Information reported from clinical microbiology laboratories is critical to preparedness efforts, both for bioterrorism and emerging infectious diseases. Effective communication is essential to a dynamic link between these groups, yet the clinical microbiologist and public health response staff seldom interacts directly and both may lack an understanding of the clinical microbiology laboratory's role in public health.

Beginning in fall of 2004, the Bureau of Laboratories, working with the Bureau of Epidemiology, the Office of Public Health Preparedness and Regional Laboratory staff, convened luncheon meetings in each region of the state to focus on the response that would follow from a report of an emerging infectious disease. Clinical microbiologists as well as infection control practitioners, hospital pharmacists and safety officers were invited to join local health department staff such as communicable disease nurses, epidemiologists and sanitarians around small tables. Using a model which involved members of each discipline working together in a problem-solving scenario, participants examined the roles each would play in dealing with a local emerging infectious disease incident, from the introduction of the patient to the health care system, through recognition of the agent involved, reporting to local health and to the actions which would ensue at local, regional and state levels following reporting.

Scenarios are chosen to represent timely issues of some complexity, such as foodborne disease outbreaks involving multiple local jurisdictions and medical facilities, or the possible importation of Avian flu. A popular portion of each meeting has been the presentation of the most recently reported infectious diseases specific to the region gathered from the Michigan Disease Surveillance System (MDSS). Although this disease reporting system is new to most clinical laboratories, local health staff have been utilizing it for routine disease reporting for the past six months and will play a lead role in expanding access to the clinical laboratories.

The response to these meetings has been extremely positive, allowing people who might have spoken on the phone or communicated via intermediary infection control personnel the opportunity to develop face-to-face relationships. It is clear that time is a sparse commodity for clinical laboratorians and others in the current environment but we hope that all clinical microbiologists will be afforded the opportunity to attend these meetings to meet their public health colleagues. Together, they can help identify effective processes as well as barriers in the clinical world.

The Bureau of Laboratories appreciates the funding received through the federal bioterrorism grant that supports these meetings and allows the clinical microbiologists of our state to be at the table with their public health partners in disease prevention. The REIDs have been so successful that the model will be presented at the national Bioterrorism Conference in Atlanta in late February where other states may learn from this example. With the Support and partnership of the exceptional clinical microbiology community of Michigan, public health will be able to respond effectively and expediently to emerging infectious diseases.

Changes in Amplified Testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*

James Rudrik, Ph.D.
Microbiology Section

On April 1, 2005 the Michigan Department of Health (MDCH) and its Regional Laboratories will switch gonorrhea (GC) and chlamydia (CT) amplified testing from Becton Dickinson's ProbeTec to GenProbe's Aptima. Based on the verification studies conducted at MDCH, the Aptima test offers several advantages over ProbeTec.

While both tests performed well and comparably in detecting GC, Aptima showed a 15.8% increase in sensitivity for chlamydia over ProbeTec in an evaluation of 435 urine, urethral, and endocervical specimens. Also, Aptima specimen transport, swab and urine specimens are stable for 60 and 30 days, respectively, at room temperature compared to only six days for ProbeTec specimens. Since the U. S. Postal Service delivers most specimens tested by the Regional Laboratory System, the extended stability virtually eliminates the possibility of receiving expired specimens. The changes will also result is some labor savings for the laboratory. Urine specimens collected with GenProbe kits require 47% less hands-on processing time than urine specimens tested by ProbeTec. The increase in urine specimen stability and the decrease in processing time will allow urine testing by all submitters throughout the state.

The switch to Aptima compliments other changes made to amplified testing on October 1, 2004. Those changes involve a decrease in the availability of GC testing in areas where the prevalence is low. When the prevalence of GC is low (approximately 1%), the positive predictive value of a positive test is 44%. This means that without confirmation the test is not suitable for distinguishing a false-positive result from a true positive. Thus, it is not advisable to screen the general population for GC in low prevalence areas. These changes were based on epidemiological data collected on the prevalence of GC in Michigan and a statistical analysis of test performance.

Although the testing changes were originally applied to federally funded testing in Sexually Transmitted Disease (STD) and Planned Parenthood clinics, they have been extended to cover all testing (pre-funded and billed) performed by the Regional Lab System. Billed testing for CT/GC will be available in Bay, Berrien, Cass, Calhoun, Genesee, Ingham, Jackson, Kalamazoo, Kent, Lenawee, Muskegon, Monroe, Oakland, Saginaw, St. Clair, Washtenaw, Wayne, and Van Buren counties. Specimens submitted from all other counties will be tested for CT only. The fee for CT/GC testing will remain $13.50 and the fee for CT only testing will be $12.00.

In counties that are limited to CT only testing, there may be indications for testing both CT and GC. If this appears to be the case, approval for GC testing must be obtained on a case-by-case basis from the director of the Regional Laboratory performing your testing. Since the presence of one STD is a risk factor for other STDs, any specimen from a CT only county that tests positive for CT will automatically be tested for GC at no additional charge.

Influenza Updates

For information regarding the 2004-2005 influenza season, simply go to www.michigan.gov/influenza. This site contains the latest news releases and recommendations from the Michigan Department of Community Health. It also contains influenza surveillance data and links to other helpful influenza websites.

Editorial

LabLink Turns Ten

Susan L. Shiflett, Editor

They say that time goes by faster the older you get. I would have to agree. Who would have thought that this brief information sheet (we could not originally call it a newsletter) would actually survive into its tenth year? The brainchild of Robert Martin, Dr. P.H., *LabLink* was designed as a communication tool between private clinical laboratories, hospital laboratories, county health departments and public health laboratories. *LabLink*'s goals were to keep laboratories and public health practitioners informed of services available from the Michigan Department of Community Health's, Bureau of Laboratories, while updating them on emerging laboratory issues. Lou Guskey, Ph.D, suggested the name, LabLink. He stated that the purpose, to link all labs, should be the title.

That first issue seemed to take forever. Who would write articles? What would they write about? Meeting the protocols for printing was daunting, but in June 1995, even with misspellings, the first issue was printed and mailed. It was three and a half pages of articles, with two pages being an article by Dr. Martin.

There have been many changes over the last ten years. A new masthead and logo appeared in April of 1997. "Quirky Bugs" arrived in 1998 (Vol.3, No.3). Dr. Martin left for the Centers of Control and Prevention (CDC) in 1999 and Frances Pouch Downes, Dr.P.H., became the Laboratory Director. "Fun Fungi" debuted in 2001 (Vol.6, No.4). The *LabLink* went seasonal instead of publishing in certain months allowing more flexibility as work in the lab seemed to continue whether or not an article had to be written. Finally, *LabLink* went to the web and e-mail, forsaking the U.S. Mail Service.

LabLink has reported many changes at MDCH and in the laboratory world. There has been VISA, VRSA, GISA, DNA probes for Chlamydia and Gonorrhoeae, PCR and PFGE, *E. coli* O157:H7, the change from SLT to STX, *Salmonella* serotype Typhimurium DT 104, Norwalk-like virus changing to Norovirus, Arbovirus testing, HCV testing, viral load testing, faxing results, Bovine TB in deer, regionalization of the foodborne illness testing, drinking water testing moving to the Department of Environmental Quality (DEQ), the Laboratory Response Network, newborn screening testing their four millionth baby, bioterrorism and chemical terrorism, employee promotions and losses. Looking back over the past issues, it was amazing to see how much has gone on in one decade.

Thank you to all who have contributed articles, ideas and support and continue to do so. Thank you to the readers who have responded with e-mails and phone calls. Hopefully, we will continue to share our thoughts and link our labs for another ten years.

[Special thanks to the *LabLink* Editor, Susan Shiflett, who for ten years has provided leadership and commitment to keeping *LabLink* as one of the Bureau of Laboratories critical links to the clinical laboratory community. Frances Pouch Downes, Dr. P.H., Director, Bureau of Laboratories]

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